7. (Twice Amended) An improvement as claimed in claim 1, characterised in that the polymer layer is embossed to produce embossed soft tissue.

8. (Twice Amended) An improvement as claimed in claim 1, together with a transfer means which consists of the transfer belt (16) itself, which runs round a predetermined part of the Yankee cylinder (5) to form an extended transfer nip.

REMARKS

The preceding amendment is respectfully submitted in response to the outstanding Office Action of March 8, 2001 on the above-identified application. Its entry and a reconsideration of the claims, as amended, by the Examiner are respectfully requested.

Referring to the Office Action Summary (Form PTO-326) accompanying the action, eight claims are pending in the application. All were rejectd in the action on both formal and prior-art grounds.

Turning to page 2 of the action, claims 1 through 8 were rejected under 35 U.S.C. §112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention.

In his comments, the Examiner suggested that the claims should be rewritten in the form of method claims having positive manipulative steps to perform the use of the essentially impermeable transfer belt. Instead, while appreciating the Examiner's suggestion, the claims have been amended into Jepson format. The Applicant trusts that in this format the claims will no longer be susceptible to formal rejection. Entry of the amendment is therefore respectfully requested.

At the bottom of page 2, claims 1 through 4, 6 and 8 were rejected under 35 U.S.C §103(a) as being unpatentable for obviousness over U.S. Patent No. 5,393,384 (Steiner et al.) in view of U.S. Patent No. 5,298,124 (Eklund et al.). Steiner et al. shows a tissue machine which includes an impermeable carrier belt. The belt carries a tissue web to a Yankee drying cylinder, where the tissue web is transferred from the belt to the cylinder at a nip formed between a roll and the cylinder. As discussed in the present application, the transfer is not always accomplished reliably because the tissue web tends to remain on the

smooth belt following exit from the nip. (Specification; page 1, line 22 to page 2, line 9).

Eklund et al. shows a transfer belt whose surface has a pressure-responsive recoverable degree of roughness. That is to say, the transfer belt has a smooth surface when compressed in a press nip, but a relatively rough surface when not in a press nip. This property enables a paper web to be removed from the transfer belt downstream from a press nip by a vacuum transfer roll.

In the present invention, a belt of the variety shown in Eklund et al. is used to transfer a tissue web to a Yankee drying cylinder at a nip. However, Eklund et al. teaches that the surface of the transfer belt becomes smooth in nip, and, as a consequence, that a paper or tissue web would not be readily removable from the transfer belt at such a point. Accordingly, the present invention, an improvement for a tissue machine in which the belt shown in Eklund et al. caries a tissue web to a Yankee drying cylinder and transfers the tissue web to the cylinder at a nip, is neither shown nor suggested by the combined teachings of Steiner et al. and Eklund et al.. Accordingly, claim 1 is respectfully submitted to be patentable

thereover, as are claims 2, 3, 4, 6 and 8 which depend from and further limit the subject matter claimed in claim 1.

On page 3 of the action, claim 5 was rejected as being unpatentable for obviousness over Steiner et al. in view of Eklund et al. and further in view of U.S. Patent No. 4,529,643 (Lundström). Lundström shows a press fabric whose structure is filled with a rubber or resin emulsion. Be that as it may, Lundström does not show or suggest what is lacking in the combined teachings of Steiner et al. and Eklund et al. - - that the belt shown in Eklund et al. might be used to transfer a tissue web from the belt to a Yankee drying cylinder to a press nip. Claim 5 is respectfully submitted to be patentable over the combined teachings of the cited references, and for further limiting the subject matter claimed in patentable claim 1.

Finally, on page 5 of the action, claim 7 was rejected as being unpatentable for obviousness over Steiner et al. in view of Eklund et al. and further in view of U.S. Patent No. 5,556,509 (Trokhan et al.). Trokhan et al. shows a press fabric having a permeable web-patterning layer which imprints a tissue web when the press fabric transfers the tissue web to the surface of a Yankee drying cylinder. Be that as it may, Trokhan et al. does not show or suggest what

is lacking in the combined teachings of Steiner et al. and Eklund et al. - - that the belt shown in Eklund et al. might be used to transfer a tissue web from the belt to a Yankee drying cylinder at a press nip. Claim 7 is respectfully submitted to be patentable over the combined teachings of the cited references, and for further limiting the subject matter claimed in patentable claim 1.

In view of the preceding arguments, the Examiner is respectfully requested to reconsider claims 1 through 8, as amended, and to allow same at an early date. The Examiner is also respectfully requested to change the attorney docket number for this application from 3491-42 to 3150-19.

Respectfully submitted,

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APPENDIX

1. (Amended) In [Use of an essentially impermeable transfer belt (16) for] a soft tissue paper machine having an essentially impermeable transfer belt (16) for conducting a soft tissue web (1) through a shoe press nip in the press section of the paper machine, and from the shoe press nip to a Yankee cylinder (5) in the dryer section of the paper machine in a closed draw, which Yankee cylinder forms, together with a transfer means (17), a transfer nip transferring the soft tissue web from the transfer belt to the Yankee cylinder, the improvement comprising an essentially impermeable transfer belt [comprising] having a carrier and an elastically compressible polymer layer on its side facing the paper web, the polymer layer having a hardness between 50 and 97 Shore A and having a web-contacting surface which has a pressure-sensitive resettable degree of roughness, the web-contacting surface having a degree of roughness in a non-compressed state of $R_z$ = 2-80 µm, measured according to ISO 4287, Part I, and a lower degree of roughness of $R_z$ = 0-20 µm when the polymer layer is compressed by a linear load of 20-220 kN/m applied to the

essentially impermeable transfer belt as measured in a non-extended press nip.

2. (Amended) An improvement [Use] as claimed in claim 1, characterised in that the essentially impermeable transfer belt (16) has an air permeability of less than 6 $m^3/m^2/min$, measured according to the method stated in "Standard Test Method for Air Permeability of Textile Fabrics, ASTM D 737-75, American Society of Testing and Materials".

3. (Twice Amended) An improvement [Use] as claimed in claim 1, characterised in that the polymer layer comprises a polymer composition such as acryl polymer resin, polyurethane polymer resin and polyurethane/polycarbonate polymer resin composition.

4. (Twice Amended) An improvement [Use] as claimed in claim 1, characterised in that the polymer layer comprises a particulate filler which has a hardness different from that of the polymer composition, such as kaolin clay, polymer material or metal, preferably stainless steel.

5. (Twice Amended) An improvement [Use] as claimed in claim 1, characterised in that the polymer layer completely encloses the carrier.

6. (Twice Amended) An improvement [Use] as claimed in claim 1, characterised in that the carrier is endless.

7. (Twice Amended) An improvement [Use] as claimed in claim 1, characterised in that the polymer layer is embossed to produce embossed soft tissue.

8. (Twice Amended) An improvement [Use] as claimed in claim 1, together with a transfer means which consists of the transfer belt (16) itself, which runs round a predetermined part of the Yankee cylinder (5) to form an extended transfer nip.